

#12



PCT09

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/720,493

DATE: 04/02/2003

TIME: 12:30:21

Input Set : A:\5775333.app

Output Set: N:\CRF4\04022003\I720493.raw

```

4 <110> APPLICANT: Cambridge Antibody Technology Limited
5     Williams, Andrew J
6     Tempest, Philip R
7     Holtet, Thor L
8     Main, Sarah H
9     Jackson, Helen
10    Daramola, Olalekan
12 <120> TITLE OF INVENTION: Improvements relating to antibodies
14 <130> FILE REFERENCE: AHB/CP5775333
C--> 16 <140> CURRENT APPLICATION NUMBER: US/09/720,493
C--> 17 <141> CURRENT FILING DATE: 2002-10-23
19 <150> PRIOR APPLICATION NUMBER: GB 9814383.7
20 <151> PRIOR FILING DATE: 1998-07-02
22 <160> NUMBER OF SEQ ID NOS: 22
24 <170> SOFTWARE: PatentIn Ver. 2.1
28 <210> SEQ ID NO: 1
29 <211> LENGTH: 351
30 <212> TYPE: DNA
31 <213> ORGANISM: Homo sapiens
33 <220> FEATURE:
34 <221> NAME/KEY: CDS
35 <222> LOCATION: (1)..(351)
37 <400> SEQUENCE: 1
38  cag  gtg  cag  ctg  cag  gag  tcc  ggc  cca  gga  ctg  gtg  aag  cct  tcg  gag      48
39  Gln  Val  Gln  Leu  Gln  Glu  Ser  Gly  Pro  Gly  Leu  Val  Lys  Pro  Ser  Glu
40    1              5              10              15
42  acc  ctg  tcc  ctg  acc  tgc  gct  gtc  tct  ggt  tac  tcc  atc  agc  agt  ggt      96
43  Thr  Leu  Ser  Leu  Thr  Cys  Ala  Val  Ser  Gly  Tyr  Ser  Ile  Ser  Ser  Gly
44          20              25              30
46  tac  tac  tgg  ggc  tgg  att  cgg  cag  ccc  cca  ggg  aag  ggg  ctg  gag  tgg      144
47  Tyr  Tyr  Trp  Gly  Trp  Ile  Arg  Gln  Pro  Pro  Gly  Lys  Gly  Leu  Glu  Trp
48          35              40              45
50  att  ggg  agt  atc  tat  cat  agt  ggg  agc  acc  tac  tac  aac  ccg  tcc  ctg      192
51  Ile  Gly  Ser  Ile  Tyr  His  Ser  Gly  Ser  Thr  Tyr  Tyr  Asn  Pro  Ser  Leu
52          50              55              60
54  aag  agt  cga  gtc  acc  ata  tca  gta  gac  acg  tcc  aag  aac  cag  ttc  tcc      240
55  Lys  Ser  Arg  Val  Thr  Ile  Ser  Val  Asp  Thr  Ser  Lys  Asn  Gln  Phe  Ser
56  65              70              75              80
58  ctg  aag  ctg  agc  tct  gtg  acc  gcc  gca  gac  acg  gcc  gtg  tat  tac  tgt      288
59  Leu  Lys  Leu  Ser  Ser  Val  Thr  Ala  Ala  Asp  Thr  Ala  Val  Tyr  Tyr  Cys
60          85              90              95
62  gca  aga  ggg  aag  tgg  tcg  aag  ttt  gac  tat  tgg  ggc  caa  ggc  acc  ctg      336
63  Ala  Arg  Gly  Lys  Trp  Ser  Lys  Phe  Asp  Tyr  Trp  Gly  Gln  Gly  Thr  Leu

```

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/720,493

DATE: 04/02/2003

TIME: 12:30:21

Input Set : A:\5775333.app

Output Set: N:\CRF4\04022003\I720493.raw

```

64          100          105          110
66 gtc acc gtc tct tca                      351
67 Val Thr Val Ser Ser
68          115
71 <210> SEQ ID NO: 2
72 <211> LENGTH: 117
73 <212> TYPE: PRT
74 <213> ORGANISM: Homo sapiens
76 <400> SEQUENCE: 2
77 Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Glu
78 1          5          10          15
80 Thr Leu Ser Leu Thr Cys Ala Val Ser Gly Tyr Ser Ile Ser Ser Gly
81          20          25          30
83 Tyr Tyr Trp Gly Trp Ile Arg Gln Pro Pro Gly Lys Gly Leu Glu Trp
84          35          40          45
86 Ile Gly Ser Ile Tyr His Ser Gly Ser Thr Tyr Tyr Asn Pro Ser Leu
87 50          55          60
89 Lys Ser Arg Val Thr Ile Ser Val Asp Thr Ser Lys Asn Gln Phe Ser
90 65          70          75          80
92 Leu Lys Leu Ser Ser Val Thr Ala Ala Asp Thr Ala Val Tyr Tyr Cys
93          85          90          95
95 Ala Arg Gly Lys Trp Ser Lys Phe Asp Tyr Trp Gly Gln Gly Thr Leu
96          100          105          110
98 Val Thr Val Ser Ser
99          115
101 <210> SEQ ID NO: 3
102 <211> LENGTH: 324
103 <212> TYPE: DNA
104 <213> ORGANISM: Homo sapiens
106 <220> FEATURE:
107 <221> NAME/KEY: CDS
108 <222> LOCATION: (1)..(324)
110 <400> SEQUENCE: 3
111 tcc tct gag ctg act cag gac cct gct gtg tct gtg gcc ttg gga cag 48
112 Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln
113 1          5          10          15
115 aca gtc agg atc aca tgc caa gga gac agc ctc aga agc tat tat gca 96
116 Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala
117          20          25          30
119 agc tgg tac cag cag aag cca gga cag gcc cct gta ctt gtc atc tat 144
120 Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr
121          35          40          45
123 ggt aaa aac aac cgg ccc tca ggg att cca gac cga ttc tct ggc tcc 192
124 Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
125 50          55          60
127 agc tca gga aac aca gct tcc ttg acc atc act ggg gct cag gcg gaa 240
128 Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
129 65          70          75          80
131 gat gag gct gac tat tac tgt aac tcc cgg gac agc agt ggt aac cat 288

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/720,493

DATE: 04/02/2003

TIME: 12:30:21

Input Set : A:\5775333.app

Output Set: N:\CRF4\04022003\I720493.raw

```

132 Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His
133           85           90           95           324
135 gtg gta ttc ggc gga ggg acc aag ctg acc gtc cta
136 Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
137           100           105
140 <210> SEQ ID NO: 4
141 <211> LENGTH: 108
142 <212> TYPE: PRT
143 <213> ORGANISM: Homo sapiens
145 <400> SEQUENCE: 4
146 Ser Ser Glu Leu Thr Gln Asp Pro Ala Val Ser Val Ala Leu Gly Gln
147   1           5           10           15
149 Thr Val Arg Ile Thr Cys Gln Gly Asp Ser Leu Arg Ser Tyr Tyr Ala
150           20           25           30
152 Ser Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Val Leu Val Ile Tyr
153   35           40           45
155 Gly Lys Asn Asn Arg Pro Ser Gly Ile Pro Asp Arg Phe Ser Gly Ser
156   50           55           60
158 Ser Ser Gly Asn Thr Ala Ser Leu Thr Ile Thr Gly Ala Gln Ala Glu
159   65           70           75           80
161 Asp Glu Ala Asp Tyr Tyr Cys Asn Ser Arg Asp Ser Ser Gly Asn His
162           85           90           95
164 Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu
165           100           105
169 <210> SEQ ID NO: 5
170 <211> LENGTH: 23
171 <212> TYPE: DNA
172 <213> ORGANISM: Artificial Sequence
174 <220> FEATURE:
175 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
177 <400> SEQUENCE: 5
178 agcggataac aatttcacac agg           23
181 <210> SEQ ID NO: 6
182 <211> LENGTH: 21
183 <212> TYPE: DNA
184 <213> ORGANISM: Artificial Sequence
186 <220> FEATURE:
187 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
189 <400> SEQUENCE: 6
190 gtcgtctttc cagacgttag t           21
193 <210> SEQ ID NO: 7
194 <211> LENGTH: 23
195 <212> TYPE: DNA
196 <213> ORGANISM: Artificial Sequence
198 <220> FEATURE:
199 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
201 <400> SEQUENCE: 7
202 agcggataac aatttcacac agg           23
205 <210> SEQ ID NO: 8

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/720,493

DATE: 04/02/2003

TIME: 12:30:21

Input Set : A:\5775333.app

Output Set: N:\CRF4\04022003\I720493.raw

```

206 <211> LENGTH: 21
207 <212> TYPE: DNA
208 <213> ORGANISM: Artificial Sequence
210 <220> FEATURE:
211 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
213 <400> SEQUENCE: 8
214 ctcttctgag atgagttttt g 21
217 <210> SEQ ID NO: 9
218 <211> LENGTH: 21
219 <212> TYPE: DNA
220 <213> ORGANISM: Artificial Sequence
222 <220> FEATURE:
223 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
225 <400> SEQUENCE: 9
226 accgccagag ccacctccgc c 21
229 <210> SEQ ID NO: 10
230 <211> LENGTH: 21
231 <212> TYPE: DNA
232 <213> ORGANISM: Artificial Sequence
234 <220> FEATURE:
235 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
237 <400> SEQUENCE: 10
238 ggcggaggtg gctctggcgg t 21
241 <210> SEQ ID NO: 11
242 <211> LENGTH: 30
243 <212> TYPE: DNA
244 <213> ORGANISM: Artificial Sequence
246 <220> FEATURE:
247 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
249 <400> SEQUENCE: 11
250 ctaagcttac tgagcacaca ggacctcacc 30
253 <210> SEQ ID NO: 12
254 <211> LENGTH: 35
255 <212> TYPE: DNA
256 <213> ORGANISM: Artificial Sequence
258 <220> FEATURE:
259 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
261 <400> SEQUENCE: 12
262 aattttcgaa ctacagttac tgagcacaca ggacc 35
265 <210> SEQ ID NO: 13
266 <211> LENGTH: 43
267 <212> TYPE: DNA
268 <213> ORGANISM: Artificial Sequence
270 <220> FEATURE:
271 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
273 <400> SEQUENCE: 13
274 atgggccctt ggtggaagct gaagagacgg tgaccagggt gcc 43
277 <210> SEQ ID NO: 14
278 <211> LENGTH: 56

```

RAW SEQUENCE LISTING

DATE: 04/02/2003

PATENT APPLICATION: US/09/720,493

TIME: 12:30:21

Input Set : A:\5775333.app

Output Set: N:\CRF4\04022003\I720493.raw

```

279 <212> TYPE: DNA
280 <213> ORGANISM: Artificial Sequence
282 <220> FEATURE:
283 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
285 <400> SEQUENCE: 14
286 gcaaagttaa ttaattctac tccacctagg acggtcagct tgggccctcc gccgaa      56
289 <210> SEQ ID NO: 15
290 <211> LENGTH: 57
291 <212> TYPE: DNA
292 <213> ORGANISM: Artificial Sequence
294 <220> FEATURE:
295 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
297 <400> SEQUENCE: 15
298 ttggatattc tctccacagg tgtccactcc caggtgcagc tgcaggagtc cggccca      57
301 <210> SEQ ID NO: 16
302 <211> LENGTH: 25
303 <212> TYPE: DNA
304 <213> ORGANISM: Artificial Sequence
306 <220> FEATURE:
307 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
309 <400> SEQUENCE: 16
310 ctggggctgg attcggcagc cccca      25
313 <210> SEQ ID NO: 17
314 <211> LENGTH: 25
315 <212> TYPE: DNA
316 <213> ORGANISM: Artificial Sequence
318 <220> FEATURE:
319 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
321 <400> SEQUENCE: 17
322 tgggggctgc cgaatccagc cccag      25
325 <210> SEQ ID NO: 18
326 <211> LENGTH: 25
327 <212> TYPE: DNA
328 <213> ORGANISM: Artificial Sequence
330 <220> FEATURE:
331 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
333 <400> SEQUENCE: 18
334 gccctcaggg attccagacc gattc      25
337 <210> SEQ ID NO: 19
338 <211> LENGTH: 25
339 <212> TYPE: DNA
340 <213> ORGANISM: Artificial Sequence
342 <220> FEATURE:
343 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
345 <400> SEQUENCE: 19
346 gaatcggctc ggaatccctg agggc      25
349 <210> SEQ ID NO: 20
350 <211> LENGTH: 53
351 <212> TYPE: DNA

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/720,493

DATE: 04/02/2003

TIME: 12:30:22

Input Set : A:\5775333.app

Output Set: N:\CRF4\04022003\I720493.raw

L:16 M:270 C: Current Application Number differs, Replaced Application Number

L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date